

In Memoriam

Dr. Jørgen W. Lund

(7 August 1930 – 16 November 2000)

We regret to inform our readers of the death of Dr. Jørgen W. Lund. He passed away on 16 November 2000 at the age of 70.

Dr. Lund was a most influential rotor dynamicist, with a career spanning both industry and academia, the publication of over 50 technical papers, and the authoring of a book on the subject in 1979. Lund first worked for Kockums Mechanical Works in Sweden in 1955. In 1956, he came to the United States where he worked in research capacities for General Electric, Boeing, and Mechanical Technology Inc. over the next 12 years. In 1967, he returned to his homeland, Denmark, where he served at The Technical University of Denmark, becoming a full professor in 1990. Dr. Lund retired a few years ago after a long and notable career.

Lund was recently nominated for ASME's 2001 Den Hartog Award, bestowed by ASME's Technical Committee on Vibration and Sound, for lifetime contributions to the teaching and practice of vibration engineering. The nomination contained letters of endorsement from 33 of today's leading rotor dynamicists – testimony to the profound impact that Lund has had on the subject.

Don Bently commented in his endorsement letter that Dr. Lund's work was "richly deserving of the Den Hartog Award." Bently went on to note that Lund provided "an

excellent foundation upon which my own rotor dynamic research could proceed."

Lund was the first to explain the influence of fluid-film bearings on the stability of rigid and flexible rotors. He took the field of rotor dynamics, as practiced by manufacturers and engineers, from the use of imprecise criteria based on stiff bearing beam theory to a now routinely applied and widely practiced science. He was the first person to thoroughly grasp the innate nature of the whirl frequency ratio for fluid-film bearings and to begin evaluating the stability performance of fixed-arc bearings using this important parameter. He received his Ph.D. in Mechanics in 1966 from Rensselaer Polytechnic Institute where his dissertation contained the first serious effort to examine nonlinear phenomena of a rotor supported in plain journal bearings. He, along with others, first developed the finite-difference algorithms to solve for stiffness and damping coefficients for these bearings. For a period of 10 to 12 years Lund's methods were used exclusively, and continue to be used today.

Awards that he has received include the Danish ESSO Award, 1967; Achievement Award at the International Symposium in Rotating Machinery, 1988; and the above-noted nomination for the 2001 ASME Den Hartog Award in Vibration Engineering.

Dr. Lund's students include those who attended his classes and those who were exposed to his contributions to the literature on rotor dynamics. His gentle demeanor and enormous contributions to the field of rotor dynamics will be long remembered. ☺